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TRANSMITTAL FORM

Application Serial Number	10/629,453
Filing Date	July 29, 2003
First Named Inventor	Keene
Group Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket No.	RBN-001DV
Patent No.	Not applicable
Issue Date	Not applicable

ENCLOSURES (check all that apply)

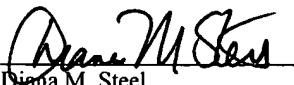
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Check Attached <input type="checkbox"/> Copy of Fee Transmittal Form <input type="checkbox"/> Amendment/Response <input type="checkbox"/> Preliminary <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Letter to Official Draftsperson including Drawings [Total Sheets _____] <input type="checkbox"/> Petition for Extension of Time <input checked="" type="checkbox"/> Information Disclosure Statement <input checked="" type="checkbox"/> Form PTO-1449 <input type="checkbox"/> Copies of IDS Citations <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Sequence Listing submission <input type="checkbox"/> Paper Copy/CD <input type="checkbox"/> Computer Readable Copy <input type="checkbox"/> Statement verifying identity of above	<input type="checkbox"/> Copy of Notice to File Missing Parts of Application (PTO-1553) <input type="checkbox"/> Formal Drawing(s) <input type="checkbox"/> Request For Continued Examination (RCE) Transmittal <input type="checkbox"/> Power of Attorney (Revocation of Prior Powers) <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Executed Declaration and Power of Attorney for Utility or Design Patent Application <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> CD(s) for large table or computer program <input type="checkbox"/> Amendment After Allowance <input type="checkbox"/> Request for Certificate of Correction <input type="checkbox"/> Certificate of Correction (in duplicate)	<input type="checkbox"/> Notice of Appeal to Board of Patent Appeals and Interferences <input type="checkbox"/> Appeal Brief (in triplicate) <input type="checkbox"/> Status Inquiry <input checked="" type="checkbox"/> Return Receipt Postcard <input checked="" type="checkbox"/> Certificate of First Class Mailing under 37 C.F.R. 1.8 <input type="checkbox"/> Certificate of Facsimile Transmission under 37 C.F.R. 1.8 <input type="checkbox"/> Additional Enclosure(s) (please identify below)
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Respectfully submitted,


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PATENT
Attorney Docket No.: RBN-001DV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Keene *et al.*
SERIAL NO.: 10/629,453 GROUP NO.: 1645
FILING DATE: July 29, 2003 EXAMINER: Not yet assigned
TITLE: Methods for Isolating and Characterizing Endogenous mRNA-Protein
(mRNP) Complexes

CERTIFICATE OF FIRST CLASS MAILING UNDER 37 C.F.R. 1.8

I hereby certify that this correspondence, and any document(s) referred to as enclosed herein, is/are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 26th day of March, 2004.


Anna-Karin Kuliga

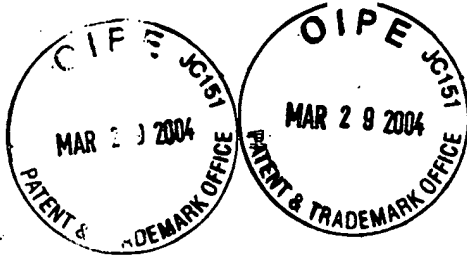
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith are:

1. Transmittal Form (1 page);
2. Information Disclosure Statement (2 pages);
3. Form PTO-1449 (4 pages); and
4. Return Receipt Postcard

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PATENT
Attorney Docket No.: RBN-001DV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Keene *et al.*
SERIAL NO.: 10/629,453 GROUP NO.: 1645
FILING DATE: July 29, 2003 EXAMINER: Not yet assigned
TITLE: Methods for Isolating and Characterizing Endogenous mRNA-Protein (mRNP) Complexes
Commissioner for Patents
P.O. Box 1540
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. In accordance with provisions of 37 C.F.R. 1.98, copies of the references were cited or submitted in the parent application U.S. Serial No. 09/750,401, filed on December 28, 2000, which is relied upon for an earlier effective filing date under 35 U.S.C. 120.

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

- ☒ (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- ☐ (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
- ☐ the requisite Statement is below, **OR**
- ☐ the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein, or

- ☐ (3) after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee**, **AND**
- ☐ the requisite Statement is below, **AND**
- ☐ the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

STATEMENT

As required under 37 C.F.R. 1.97(e), Applicant(s), through the undersigned, hereby state either that [**check the appropriate space only if either (2) or (3) is checked on the previous page and the Statement is required**]:

- ☐ 1. Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application **not more than three months** prior to the filing of the Information Disclosure Statement; or
- ☐ 2. No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to **any individual** designated in 37 C.F.R. 1.56(c) **more than three months** prior to the filing of the Information Disclosure Statement.

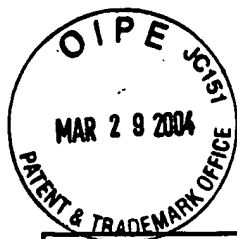
Respectfully submitted,



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FORM PTO - 1449				ATTORNEY DOCKET NO.: RBN-001DV					
INFORMATION DISCLOSURE STATEMENT				APPLICANTS: Keene <i>et al.</i>					
				SERIAL NO.: 10/629,453					
				FILING DATE: July 29, 2003					
				GROUP: 1645					
U.S. PATENT DOCUMENTS									
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
	A1	5,444,149	08/22/95	Keene et al.	530	300			
	A2	5,525,495	06/11/96	Keene et al.	435	172.3			
	A3	5,541,291	07/30/96	Keene	530	350			
	A4	5,561,222	10/01/96	Keene et al.	530	350			
	A5	5,773,246	06/30/98	Keene et al.	435	69.1			
	A6	5,866,680	02/02/99	Keene et al.	530	324			
	A7	5,882,866	03/16/99	Keene	435	6			
	A8	5,972,620	10/26/99	Keene	435	6			
FOREIGN PATENT DOCUMENTS									
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B1	WO 94/06934	03/31/94	PCT	C12Q	1/68			
OTHER ART, JOURNAL ARTICLES, ETC.									
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	C1	Anderson, N.E., <i>et al.</i> , "Autoimmune Pathogenesis of Paraneoplastic Neurological Syndromes," <u>CRC Critical Reviews in Neurobiology</u> Vol. 3; pp. 245-299 (1987)							
	C2	Antic, D., <i>et al.</i> , "ELAV Tumor Antigen, Hel-N1, by Increases Translation of Neurofilament M mRNA and Induces Formation of Neurites in Human Teratocarcinoma Cells," <u>Genes & Development</u> Vol. 13; pp. 449-461 (1999)							
	C3	Antic, D., <i>et al.</i> , "Embryonic Lethal Abnormal Visual RNA-binding Proteins Involved in Growth, Differentiation, and Posttranscriptional Gene Expression," <u>American Journal of Human Genetics</u> Vol. 61; pp. 273-278 (1997)							
EXAMINER					DATE CONSIDERED				

FORM PTO - 1449 INFORMATION DISCLOSURE STATEMENT		ATTORNEY DOCKET NO.: RBN-001DV APPLICANTS: Keene <i>et al.</i> SERIAL NO.: 10/629,453 FILING DATE: July 29, 2003 GROUP: 1645	
OTHER ART, JOURNAL ARTICLES, ETC.			
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)		
	C4	Atasoy, U., <i>et al.</i> , "ELAV Protein HuA (HuR) can Redistribute Between the Nucleus and Cytoplasm and is Unregulated During Serum Stimulation and T Cell Activation," <u>Journal of Cell Science</u> Vol. 111; pp. 3145-3156 (1998)	
	C5	Buckanovich et al., "The Neuronal RNA Binding Protein Nova-1 Recognizes Specific RNA Targets In Vitro and In Vivo," <u>Molecular and Cellular Biology</u> , 17(6):3194-3201 (1997).	
	C6	Ceman et al., "Isolation of an FMRP-Associated Messenger Ribonucleoprotein Particle and Identification of Nucleolin and the Fragile X-Related Proteins as Components of the Complex," <u>Molecular and Cellular Biology</u> , 19(12):7925-7932 (1999).	
	C7	Chambers, J.C., <i>et al.</i> , "Isolation and Analysis of cDNA Clones Expressing Human Lupus La Antigen," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 82; pp. 2115-2119 (1985)	
	C8	Chu et al., "Identification of a Thymidylate Synthase Ribonucleoprotein Complex in Human Cancer Cells," <u>Molecular and Cellular Biology</u> , 14(1):207-213 (1994).	
	C9	Crino, P., <i>et al.</i> , "Presence and Phosphorylation of Transcription Factors in Developing Dendrites," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 95; pp. 2313-2318 (1998)	
	C10	Dalmau, J., <i>et al.</i> , "The Expression of the Hu Antigen in Human Normal and Tumor Tissues," <u>American Journal of Pathology</u> Vol. 141; pp. 881-886 (1999)	
	C11	Duggan, D.J., <i>et al.</i> , "Expression Profiling using cDNA Microarrays," <u>Nature Genetics</u> Vol. 21; pp. 10-14 (1999)	
	C12	Fan, X.C., <i>et al.</i> , "Overexpression of HuR, a Nuclear-Cytoplasmic Shuttling Protein, Increases the <i>in vivo</i> Stability of ARE-Containing mRNAs," <u>The EMBO Journal</u> Vol. 17; pp. 3448-3460 (1998)	
	C13	Gao, F.B., <i>et al.</i> , "Hel-N1/Hel-N2 Proteins are Bound to PolyA + mRNA in Granular RNP Structures and are Implicated in Neuronal Differentiation," <u>Journal of Cell Science</u> Vol. 109, pp. 579-589 (1995)	
	C14	Gao, F., <i>et al.</i> , "Selection of a Subset of mRNAs from 3'UTR Combinatorial Libraries Using Neuronal RNA-Binding Protein, Hel-N1," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 91; pp. 11207-11211 (1994)	
	C15	Good, P.J., "A Conserved Family of Elav-Like Genes in Vertebrates," <u>Proc. Nat. Acad. Sci.</u> Vol. 92; pp. 4557-4561 (1995)	
	C16	International Search Report for PCT/US00/35583, April 18, 2001	
	C17	Jain, R.G., <i>et al.</i> , "Ectopic Expression of Hel-N1, and RNA-Binding Protein, Increases Glucose Transporter (GLUT1) Expression in 3T3-L1 Adipocytes," <u>Molecular and Cellular Biology</u> Vol. 17; pp. 954-962 (1997)	
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OTHER ART, JOURNAL ARTICLES, ETC.			
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)		
	C18	Keene, J.D., "Combinatorial Chemistry: Randomization and Selection of RNA to Identify Targets for RRM RNA-Binding Proteins and Antibodies," <u>Methods in Enzymology</u> , J.E. Dahlberg and J.N. Abelson, Eds., Academic Press, Inc. San Diego Vol. 267; pp. 367-383 (1996)	
	C19	Keene, J.D., "Invited Commentary: Why is Hu Where? Shuttling of Early-Response Gene Messenger RNA Subsets," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 96; pp. 5-7 (1999)	
	C20	Keene, J.D., "Methods and Compositions Useful in the Diagnosis and Treatment of Autoimmune Diseases," <u>Biotechnology Advances</u> , GB Vol. 15; p. 525 Abstract (1997)	
	C21	Keene, J.D., "RNA Surfaces as Functional Mimetics of Proteins," <u>Chemistry & Biology</u> Vol. 3; pp. 505-513	
	C22	King, P.H., <i>et al.</i> , "Mammalian Homologs of Drosophila ELAV Localized to a Neuronal Subset can Bind <i>in vitro</i> to the 3' UTR of mRNA Encoding the Id Transcriptional Repressor," <u>Journal of Neuroscience</u> Vol. 14; pp. 1943-3504 (1993)	
	C23	Levine, T.D., <i>et al.</i> , "Hel-N1: An Automimmune RNA-Binding Protein with Specificity for 3' Uridylate-Rich Untranslated Regions of Growth Factor mRNAs," <u>Molecular and Cellular Biology</u> , Vol. 13; pp. 3494-3504 (1994)	
	C24	Levy, N.S., <i>et al.</i> , "Hypoxic Stabilization of Vascular Endothelial Growth Factor mRNA by the RNA-Binding Protein, HuR," <u>Journal of Biological Chemistry</u> Vol. 273; pp. 6417-6423 (1998)	
	C25	Loftus, S.K., <i>et al.</i> , "Informatic Selection of a Neural Crest-Melanocyte cDNA set for Microarray Analysis," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 96; pp. 9277-9280 (1999)	
	C26	Lutz-Freyermuth, C., <i>et al.</i> , "The U1 RNA Binding Site of the U1 snRNP-Associated A Protein Suggests a Similarity with U2 snRNPs," <u>Molecular and Cellular Biology</u> Vol. 9; pp. 2975-2982 (1989)	
	C27	Peng, S., <i>et al.</i> , "RNA Stabilization by the AU-Rich Element Binding Protein, HuR, an ELAV Protein," <u>The EMBO Journal</u> Vol. 17; pp. 3461-3470 (1998)	
	C28	Perou, C.M., <i>et al.</i> , "Distinctive Gene Expression Patterns in Human Mammary Epithelial Cells and Breast Cancers," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 96; pp. 9212-9217 (1999)	
	C29	Reim et al., "The RRM Protein NonA from Drosophila Forms a Complex with the RRM Proteins Hrb87F and S5 and the Zn Finger Protein PEP on hnRNA," <u>Experimental Cell Research</u> , 253:573-586 (1999).	
	C30	Richter, J.D., "Analysis of mRNA Formation and Function," <u>Academic Press</u> , San Diego, p. 237-261 (1997)	
	C31	Schiavi, S.C., <i>et al.</i> , "Regulation of Proto-Oncogene mRNA Stability," <u>Biochemical and Biophysical Acta</u> Vol. 1114; pp. 95-106 (1992)	
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	C32	Sgroi, D.C., <i>et al.</i> , "In Vivo Gene Expression Profile Analysis of Human Breast Cancer Progression," <u>Cancer Research</u> Vol. 59; pp. 5656-5661 (1999)	
	C33	Shimkets, <i>et al.</i> , "Nature Biotechnology," Vol. 17, 798-803 (1999)	
	C34	Tenenbaum, S.A., <i>et al.</i> , "Identifying mRNA Subsets in Messenger Ribonucleoprotein Complexes by using cDNA Arrays," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 97; pp. 14085-14090 (2000)	
	C35	Tsai, D.E., <i>et al.</i> , "In Vitro Selection of an RNA Epitope Immunologically Cross-Reactive with a Peptide," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 89; pp. 8864-8868 (1992)	
	C36	Tsai, D.E., <i>et al.</i> , "U1snRNP-A Protein Selects a Ten Nucleotide Consensus Sequence from a Degenerate RNA Pool Presented in Various Structural Contexts," <u>Nucleic Acids Research</u> Vol. 19; 4931-4936 (1991)	
	C37	Velculescu, V.E., <i>et al.</i> , <u>Cell</u> Vol. 88; pp. 243-251 (1997)	
	C38	Velculescu, V.E., <i>et al.</i> , "Serial Analysis of Gene Expression," <u>Science</u> Vol. 270; pp. 484-487 (1995)	
	C39	Wang, W., <i>et al.</i> , "HuR Regulates Cyclin A and Cyclin B1 mRNA Stability During Cell Proliferation," <u>The EMBO Journal</u> Vol. 19; pp. 1-12 (2000)	
	C40	Wen, X., <i>et al.</i> , "Large-Scale Temporal Gene Expression Mapping of Central Nervous System Development," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 95; 334-339 (1998)	
	C41	Yang, G.P., <i>et al.</i> , "Combining SSH and cDNA Microarrays for Rapid Identification of Differentially Expressed Genes," <u>Nucleic Acids Research</u> Vol. 27; pp. 1517-1523 (1999)	
	C42	Zhang, J., <i>et al.</i> , "A Novel Cytoplasmic Protein with RNA-Binding Motifs is an Autoantigen in Human Hepatocellular Carcinoma," <u>Journal of Experimental Medicine</u> Vol. 189; pp. 1101-1110 (1999)	
	C43	Zhao, R., <i>et al.</i> , "Analysis of p53-Regulated Gene Expression Patterns using Oligonucleotide Arrays," <u>Genes & Development</u> Vol. 14; pp. 981-993 (2000)	
	C44	Zong, Q., <i>et al.</i> , "Messenger RNA Translation State: The Second Dimension of High-Throughput Expression Screening," <u>Proc. Natl. Acad. Sci. USA</u> Vol. 96; pp. 10632-10636 (1999)	
EXAMINER		DATE CONSIDERED	

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